The American Journal of PATHOLOGY

CONTENTS FOR VOLUME 143

July 1993

Editorial

1 *The American Journal of Pathology*—Are We There?

Commentary

3 Transforming Growth Factor-β_1 Knockout Mice
Asbok B. Kulkarni and Stefan Karlsson

Short Communications

10 Extravasation and Transcytosis of Liposomes in Kaposi's Sarcoma-Like Dermal Lesions of Transgenic Mice Bearing the HIV Tat Gene
Sbi Kun Huang, Frank J. Martin, Gilbert Jay, Jonathan Vogel, Demetrios Papahadjopoulos, and Daniel S. Friend

Technical Advances

15 Use of FISH to Detect Chromosomal Translocations and Deletions
Wonbae Lee, Kyungja Han, Charles P. Harris, Sangin Shim, Sunmoo Kim, and Lorraine F. Meisner

Regular Articles

20 Expression of the *rasT24* Oncogene in the Ciliary Body Pigment Epithelium and Retinal Pigment Epithelium Results in Hyperplasia, Adenoma, and Adenocarcinoma
Patricia Chévez-Barrios, David L. Schaffner, Roberto Barrios, Paul A. Overbeek, Russell M. Lebovitz, and Michael W. Lieberman

29 Disseminated BK Type Polyomavirus Infection in an AIDS Patient Associated with Central Nervous System Disease
Angelika Vallbracht, Jürgen Löhler, Jan Gossmann, Thomas Glück, Dirk Petersen, Hans-Joachim Gerth, Milojko Gencic, and Kristina Dörries

40 *In Situ* Detection of PCR-Amplified HIV-1 Nucleic Acids and Tumor Necrosis Factor cDNA in Cervical Tissues
Gerard J. Nuovo, Angella Forde, Phyllis MacConnell, and Roxanne Fabrenwald

49 Epstein-Barr Virus and the Lacrimal Gland Pathology of Sjögren's Syndrome
Stephen C. Pflugfelder, Cecelia A. Crouse, Dagoberto Monroy, Michael Yen, Martin Rowe, and Sally S. Atherton

65 Regulation of Complement Membrane Attack Complex Formation in Myocardial Infarction
Antti Väkevä, Pekka Laurila, and Seppo Meri

76 Murine Tissue Factor Gene Expression *In Vivo*
Nigel Mackman, Michael S. Sawdey, Mark R. Keeton, and David J. Loskutoff

85 Humoral and Cellular Immunopathology of Hepatic and Cardiac Hamster-into-Rat Xenograft Rejection: Marked Stimulation of $IgM^{+\ +bright}/IgD^{+dull}$ Splenic B Cells
A. Langer, L.A. Valdivia, N. Murase, J. Woo, S. Celli, J.J. Fung, T.E. Starzl, and A.J. Demetris

99 Regressing Thin Cutaneous Malignant Melanomas (≤1.0 mm) Are Associated with Angiogenesis
Raymond L. Barnhill and Marcia A. Levy

The American Journal of PATHOLOGY

CONTENTS FOR VOLUME 143

July 1993

Editorial

1 *The American Journal of Pathology*—Are We There?

Commentary

3 Transforming Growth Factor-β_1 Knockout Mice
Asbok B. Kulkarni and Stefan Karlsson

Short Communications

10 Extravasation and Transcytosis of Liposomes in Kaposi's Sarcoma-Like Dermal Lesions of Transgenic Mice Bearing the HIV Tat Gene
Sbi Kun Huang, Frank J. Martin, Gilbert Jay, Jonathan Vogel, Demetrios Papahadjopoulos, and Daniel S. Friend

Technical Advances

15 Use of FISH to Detect Chromosomal Translocations and Deletions
Wonbae Lee, Kyungja Han, Charles P. Harris, Sangin Shim, Sunmoo Kim, and Lorraine F. Meisner

Regular Articles

20 Expression of the *rasT24* Oncogene in the Ciliary Body Pigment Epithelium and Retinal Pigment Epithelium Results in Hyperplasia, Adenoma, and Adenocarcinoma
Patricia Chévez-Barrios, David L. Schaffner, Roberto Barrios, Paul A. Overbeek, Russell M. Lebovitz, and Michael W. Lieberman

29 Disseminated BK Type Polyomavirus Infection in an AIDS Patient Associated with Central Nervous System Disease
Angelika Vallbracht, Jürgen Löhler, Jan Gossmann, Thomas Glück, Dirk Petersen, Hans-Joachim Gerth, Milojko Gencic, and Kristina Dörries

40 *In Situ* Detection of PCR-Amplified HIV-1 Nucleic Acids and Tumor Necrosis Factor cDNA in Cervical Tissues
Gerard J. Nuovo, Angella Forde, Phyllis MacConnell, and Roxanne Fabrenwald

49 Epstein-Barr Virus and the Lacrimal Gland Pathology of Sjögren's Syndrome
Stephen C. Pflugfelder, Cecelia A. Crouse, Dagoberto Monroy, Michael Yen, Martin Rowe, and Sally S. Atherton

65 Regulation of Complement Membrane Attack Complex Formation in Myocardial Infarction
Antti Väkevä, Pekka Laurila, and Seppo Meri

76 Murine Tissue Factor Gene Expression *In Vivo*
Nigel Mackman, Michael S. Sawdey, Mark R. Keeton, and David J. Loskutoff

85 Humoral and Cellular Immunopathology of Hepatic and Cardiac Hamster-into-Rat Xenograft Rejection: Marked Stimulation of $IgM^{+\ +bright}/IgD^{+dull}$ Splenic B Cells
A. Langer, L.A. Valdivia, N. Murase, J. Woo, S. Celli, J.J. Fung, T.E. Starzl, and A.J. Demetris

99 Regressing Thin Cutaneous Malignant Melanomas (≤1.0 mm) Are Associated with Angiogenesis
Raymond L. Barnhill and Marcia A. Levy

105 Defect of Fc Receptors and Phenotypical Changes in Sinusoidal Endothelial Cells in Human Liver Cirrhosis
Hiroyuki Muro, Haruyuki Shirasawa, Isao Kosugi, and Satoshi Nakamura

121 Active Collagen Synthesis by Pulmonary Arteries in Human Primary Pulmonary Hypertension
Mitchell D. Botney, Michael J. Liptay, Larry R. Kaiser, Joel D. Cooper, William C. Parks, and Robert P. Mecham

130 Sequential Expression of Transforming Growth Factors α and β_1 by Eosinophils During Cutaneous Wound Healing in the Hamster
David T. W. Wong, R. Bruce Donoff, James Yang, Bai-Zheng Song, Karekine Matossian, Naoyoshi Nagura, Aram Elovic, Jim McBride, George Gallagher, Randy Todd, Tao Chiang, Lin S.-S. Chou, Chou Ming Yung, Stephen J. Galli, and Peter F. Weller

143 Effect of Diabetes and Aging on Human Sympathetic Autonomic Ganglia
Robert E. Schmidt, Santiago B. Plurad, Curtis A. Parvin, and Kevin A. Roth

154 Characterization of Integrin Receptors in Normal and Neoplastic Human Brain
Werner Paulus, Inge Baur, Detlef Schuppan, and Wolfgang Roggendorf

164 Immunohistochemical Study of Intimal Microvessels in Coronary Atherosclerosis
Yixia Zhang, Walter J. Cliff, Gutta I. Schoefl, and Grace Higgins

173 Fibronectin Expression Correlates with U937 Cell Adhesion to Migrating Bovine Aortic Endothelial Cells *in Vitro*
Ingeborg A. Hauser, Eva Setter, Leonard Bell, and Joseph A. Madri

181 Angiogenic Role of Endogenous Basic Fibroblast Growth Factor Released by Rat Aorta after Injury
Sergio Villaschi and Roberto F. Nicosia

191 Expression of Intercellular Adhesion Molecule-1 on Transitional Cell Cancer
Yoshihiko Tomita, Hisami Watanabe, Hisashi Kobayashi, Tsutomu Nishiyama, Shoji Tsuji, Kohzoh Imai, Toru Abo, Michio Fujiwara, and Shotaro Sato

199 Immunohistochemical Study of p53 in Human Lung Carcinomas
Elizabeth Brambilla, Sylvie Gazzeri, Denis Moro, Claude Caron de Fromentel, Valérie Gouyer, Michèle Jacrot, and Christian Brambilla

211 Nuclear A-Type Lamins Are Differentially Expressed in Human Lung Cancer Subtypes
Jos L. V. Broers, Yves Raymond, Mirjam Klein Rot, Helma Kuijpers, Sjoerd Sc. Wagenaar, and Frans C. S. Ramaekers

221 Viral Infection and Dissemination Through the Olfactory Pathway and the Limbic System by Theiler's Virus
Yoshiaki Wada and Robert S. Fujinami

230 Detection of Clonal B Cell Populations in Paraffin-Embedded Tissues by Polymerase Chain Reaction
Ralf Küppers, Min Zhao, Klaus Rajewsky, and Martin L. Hansmann

240 Human Immunodeficiency Virus-Associated Oral Kaposi's Sarcoma: A Heterogeneous Cell Population Dominated by Spindle-Shaped Endothelial Cells
Joseph A. Regezi, Laurie A. MacPhail, Troy E. Daniels, Yvonne G. DeSouza, John S. Greenspan, and Deborah Greenspan

250 Transcription of Carcinoembryonic Antigen in Normal Colon and Colon Carcinoma: *In Situ* Hybridization Study and Implication for a New *In Vivo* Functional Model
Serge Jothy, Song-Yang Yuan, and Kinji Shirota

258 Monoclonal Antibodies to a Rat Nestin Fusion Protein Recognize a 220-kDa Polypeptide in Subsets of Fetal and Adult Human Central Nervous System Neurons and in Primitive Neuroectodermal Tumor Cells
Takashi Tohyama, Virginia M.-Y. Lee, Lucy B. Rorke, Martha Marvin, Ron D.G. McKay, and John Q. Trojanowski

269 Basic Fibroblast Growth Factor Has a Differential Effect on MyoD Conversion of Cultured Aortic Smooth Muscle Cells from Newborn and Adult Rats
Johan W. van Neck, John J. Medina, Carla Onnekink, Peter F. M. van der Ven, Henri P. J. Bloemers, and Stephen M. Schwartz

283 Immunoreactivity and Expression of Amylin in Gastroenteropancreatic Endocrine Tumors
Rolf Eissele, Christian Neubaus, Michael E. Trautmann, Armin Funk, Rudolf Arnold, and Heinz Höfler

292 Derivation of Ductlike Cell Lines from a Transplantable Acinar Cell Carcinoma of the Rat Pancreas
O. S. Pettengill, R. A. Faris, R. H. Bell, Jr., E. T. Kuhlmann, and D. S. Longnecker

304 Ultrastructural Localization of DNA in Immune Deposits of Human Lupus Nephritis
Daniela Malide, Irène Londoño, Pierre Russo, and Moïse Bendayan

312 Age-Dependent Basal Level and Induction Capacity of Copper-Zinc and Manganese Superoxide Dismutase and Other Scavenging Enzyme Activities in Leukocytes from Young and Elderly Adults
Yukie Niwa, Osamu Iizawa, Koichi Ishimoto, Hirohiko Akamatsu, and Tadashi Kanoh

321 **Announcements**

322 **Information for Authors**

August 1993

Editorial

325 Keratinocytes: Key Immunocytes of the Integument
Brian J. Nickoloff and Laurence A. Turka

Commentary

332 The Placenta Revealed
Harvey J. Kliman

Short Communications

337 Interleukin-4 Down-Regulates Adult Human Astrocyte DNA Synthesis and Proliferation
Melinda L. Estes, Koichi Iwasaki, Barbara S. Jacobs, and Barbara P. Barna

342 Enhanced Tumorigenicity of an Epstein–Barr Virus-Transformed Lymphoblastoid Cell Line Is Associated with a Unique 1:18 Chromosomal Translocation and Decreased Expression of Lymphocyte Function Associated Antigen-1a (CD11A)
Gastón R. Picchio, Jeffrey I. Cohen, Eric R. Wyatt, and Donald E. Mosier

350 Cytotoxic Potential of Intraepithelial Lymphocytes (IELs): Presence of TIA-1, the Cytolytic Granule-Associated Protein, in Human IELs in Normal and Diseased Intestine
Gary J. Russell, Cathryn Nagler-Anderson, Paul Anderson, and Atul K. Bhan

Regular Articles

355 Characterization and Functional Analysis of the Expression of Intercellular Adhesion Molecule-1 in Human Papillomavirus-Related Disease of Cervical Keratinocytes
Nicholas Coleman, Isobel M. Greenfield, John Hare, Huw Kruger-Gray, Benjamin M. Chain, and Margaret A. Stanley

368 Spatial and Temporal Patterns of Immunoreactive Transforming Growth Factor β_1, β_2, and β_3 during Excisional Wound Repair
Jeffrey H. Levine, Harold L. Moses, Leslie I. Gold, and Lillian B. Nanney

381 Immunocytochemical Localization of Secreted Transforming Growth Factor-β_1 to the Advancing Edges of Primary Tumors and to Lymph Node Metastases of Human Mammary Carcinoma
Bakul I. Dalal, Paul A. Keown, and Arnold H. Greenberg

390 Detection of the Apoptosis-Suppressing Oncoprotein *bcl-2* in Hormone-Refractory Human Prostate Cancers
Marc Colombel, Fraser Symmans, Sixtina Gil, Kathleen M. O'Toole, Dominique Chopin, Mitchell Benson, Carl A. Olsson, Stanley Korsmeyer, and Ralph Buttyan

401 Tumor Angiogenesis Correlates with Metastasis in Invasive Prostate Carcinoma
Noel Weidner, Peter R. Carroll,, Jonathan Flax, Walter Blumenfeld, and Judah Folkman

410 Expression of Intercellular Adhesion Molecule-1 in Rat Heart with Ischemia/Reperfusion and Limitation of Infarct Size by Treatment with Antibodies against Cell Adhesion Molecules
Tsutomu Yamazaki, Yoshinori Seko, Takuya Tamatani, Masayuki Miyasaka, Hideo Yagita, Ko Okumura, Ryozo Nagai, and Yoshio Yazaki

419 Effects of Late Reperfusion on Infarct Expansion and Infarct Healing in Conscious Rats
Masato Morita, Seinosuke Kawashima, Masahiro Ueno, Akira Kubota, and Tadaaki Iwasaki

431 Immunohistochemical, Quantitative Immunoelectron Microscopic, and DNA Cytofluorometric Characterization of Chemically Induced Rat Malignant Fibrous Histiocytoma
Tatsuaki Tsuchiya, Kiyoshi Takahashi, Motohiro Takeya, Yohei Hosokawa, Takanori Hattori, and Katsumasa Takagi

446 Apoptosis of T Lymphocytes in Experimental Autoimmune Encephalomyelitis: Evidence for Programmed Cell Death as a Mechanism to Control Inflammation in the Brain
Mascha Schmied, Helene Breitschopf, Ralf Gold, Hans Zischler, Gregor Rothe, Hartmut Wekerle, and Hans Lassmann

453 Requirements for Tumor Necrosis Factor-α and Interleukin-1 in Limb Ischemia/Reperfusion Injury and Associated Lung Injury
Andreas Seekamp, Jeffrey S. Warren, Daniel G. Remick, Gerd O. Till, and Peter A. Ward

464 Role of β2 Integrins and ICAM-1 in Lung Injury following Ischemia-Reperfusion of Rat Hind Limbs
Andreas Seekamp, Michael S. Mulligan, Gerd O. Till, C. Wayne Smith, Masayuki Miyasaka, Takuya Tamatani, Robert F. Todd III, and Peter A. Ward

473 Villitis of Unknown Etiology Is Associated with Major Infiltration of Fetal Tissue by Maternal Inflammatory Cells
Raymond W. Redline and Patricia Patterson

480 Expression of Tumor Necrosis Factor-α and Its mRNA in the Endometrial Mucosa During the Menstrual Cycle
Marie-Marthe Philippeaux and Pierre François Piguet

487 αB-Crystallin and 27-kd Heat Shock Protein Are Regulated by Stress Conditions in the Central Nervous System and Accumulate in Rosenthal Fibers
Toru Iwaki, Akiko Iwaki, Jun Tateishi, Yoshiyuki Sakaki, and James E. Goldman

496 Plasma Protein Insudation as an Index of Early Coronary Atherogenesis
Yixia Zhang, Walter J. Cliff, Gutta I. Schoefl, and Grace Higgins

507 A Ribonuclease Inhibitor Expresses Anti-Angiogenic Properties and Leads to Reduced Tumor Growth in Mice
Igor J. Polakowski, Martin K. Lewis, VR. Muthukkaruppan, Boyd Erdman, Louis Kuhai, and Robert Auerbach

518 Elevated Expression of Basic Fibroblast Growth Factor in an Immortalized Rabbit Smooth Muscle Cell Line
Jeffrey A. Winkles, Robert Friesel, Gregory F. Alberts, M. Fouad Janat, and Gene Liau

528 Growth and Invasion of Human Melanomas in Human Skin Grafted to Immunodeficient Mice
Istvan Jubasz, Steven M. Albelda, David E. Elder, George F. Murphy, Koji Adachi, Dorothee Herlyn, Istvan T. Valyi-Nagy, and Meenhard Herlyn

538 Cooperation of Ito Cells and Hepatocytes in the Deposition of an Extracellular Matrix *In Vitro*
Olivier Loréal, Françoise Levavasseur, Catherine Fromaget, Daniel Gros, André Guillouzo, and Bruno Clément

545 K-*ras* Oncogene Activation in Adenocarcinoma of the Human Pancreas: A Study of 82 Carcinomas Using a Combination of Mutant-Enriched Polymerase Chain Reaction Analysis and Allele-Specific Oligonucleotide Hybridization
Ralph H. Hruban, Alphonsus D.M. van Mansfeld, G. Johan A. Offerhaus, D. Henk J. van Weering, David C. Allison, Steven N. Goodman, Thomas W. Kensler, Kallol K. Bose, John L. Cameron, and Johannes L. Bos

555 The Demyelinating Potential of Antibodies to Myelin Oligodendrocyte Glycoprotein Is Related to Their Ability to Fix Complement
S. J. Piddlesden, H. Lassmann, F. Zimprich, B. P. Morgan, and C. Linington

565 Biochemical and Anatomical Redistribution of Tau Protein in Alzheimer's Disease
E. B. Mukaetova-Ladinska, C. R. Harrington, M. Roth, and C. M. Wischik

579 T-Cell Infiltration and Expression of MHC Class II Antigen by Macrophages and Microglia in a Heterogeneous Group in Leukoencephalopathy
Hidekazu Tomimoto, Ichiro Akiguchi, Haruhiko Akiyama, Jun Kimura, and Takehiko Yanagihara

587 Development of Functional Diversity in Mouse Macrophages: Mutual Exclusion of Two Phenotypic States
Daniel J. Laszlo, Peter M. Henson,, Linda K. Remigio, Lisa Weinstein, Carol Sable, Paul W. Noble, and David W. H. Riches

598 Detection of Two Forms of GP330: Their Role in Heymann Nephritis
David R. Bachinsky, Gang Zheng, John L. Niles, Margaret McLaughlin, Mauro Abbate, Giuseppe Andres, Dennis Brown, and Robert T. McCluskey

612 Proliferation of Endothelial Component of Parathyroid Gland in Multiple Endocrine Neoplasia Type 1: Potential Relationship with a Mitogenic Factor
Tiziana D'Adda, Andrea Amorosi, Gianni Bussolati, Maria Luisa Brandi, and Cesare Bordi

618 Ultrastructural Morphology, Cytochemistry, and Morphometry of Eosinophil Granules in Chédiak-Higashi Syndrome
Sumiko C. Hamanaka, Charles S. Gilbert, Delcye A. White, and Richard T. Parmley

Animal Models

628 Rabbit Models of Arthritis: Immunolocalization of Matrix Metalloproteinases and Tissue Inhibitor of Metalloproteinase in Synovium and Cartilage
R. M. Hembry, M. R. Bagga, G. Murphy, B. Henderson, and J. J. Reynolds

643 Immotile Cilia Syndrome in Pigs: A Model for Human Disease
F. Roperto, P. Galati and P. Rossacco

648 **Errata**

650 **Anouncements**

September 1993

Short Communications

651 Expression and Localization of Tumor Necrosis Factor-α and Its mRNA in Idiopathic Pulmonary Fibrosis
Pierre F. Piguet, Catherine Ribaux, Vildan Karpuz, Georges E. Grau, and Yusuf Kapanci

656 A Putative Marker for Human Melanoma: A Monoclonal Antibody Derived from the Melanoma Gene in the *Xiphophorus* Melanoma Model
Juergen R. Vielkind, Victor A. Tron, Barbara M. Schmidt, Graeme J. Dougherty, Vincent C. Ho, Bruce W. Woolcock, Babram Sadaghiani, and Cam J. Smith

663 Interstitial Collagenase Gene Expression in Colonic Neoplasia
Steven T. Gray, Kankatsu Yun, Tadashi Motoori, and Yvonne M. Kuys

672 LFA-1 Expression on Exocrine Glands as a Potential Novel Marker of Malignant Disease
Emiko Futagami-Mizoguchi, Akira Yamada, Atsushi Mizoguchi, Yasuhisa Imai, and Mitchel Mitsuo Yokoyama

678 Angiogenic Macrophages Produce the Angiogenic Inhibitor Thrombospondin 1
Luisa A. DiPietro and Peter J. Polverini

Regular Articles

685 Pancreatic Acinar Cell Carcinoma: An Analysis of Cell Lineage Markers, p53 Expression, and Ki-*ras* Mutation
Anne Hoorens, Nicholas R. Lemoine, Elizabeth McLellan, Toshio Morohoshi, Terumi Kamisawa, Philipp U. Heitz, Bernhard Stamm, Josef Rüschoff, B. Wiedenmann, and Günter Klöppel

699 Alterations of Thymus Cortical Epithelium and Interdigitating Dendritic Cells but No Increase of Thymocyte Cell Death in the Early Course of Simian Immunodeficiency Virus Infection
J.G. Müller, V. Krenn, C. Schindler, S. Czub, C. Stahl-Hennig, C. Coulibaly, G. Hunsmann, C. Kneitz, T. Kerkau, A. Rethwilm, V. terMeulen, and H.K. Müller-Hermelink

714 Chromosome Aberrations in Mesoblastic Nephroma
Deborah E. Schofield, Eduardo J. Yunis, and Jonathan A. Fletcher

725 Expression of VCAM-1 and E-Selectin in an *in Vivo* Model of Endothelial Activation
Jochen W. U. Fries, Amy J. Williams, Robert C. Atkins, Walter Newman, Mary F. Lipscomb, and Tucker Collins

738 Expression of Cell-Cell and Cell-Matrix Adhesion Proteins by Sinusoidal Endothelial Cells in the Normal and Cirrhotic Human Liver
Anne Couvelard, Jean-Yves Scoazec, and Gérard Feldmann

753 Type 1 Plasminogen Activator Inhibitor Gene Expression Following Partial Hepatectomy
Jacob Schneiderman, Michael Sawdey, Heather Craig, Terri Thinnes, Gerald Bordin, and David J. Loskutoff

763 Platelet Activation Releases Megakaryocyte-Synthesized Apolipoprotein J, a Highly Abundant Protein in Atheromatous Lesions
David P. Witte, Bruce J. Aronow, Martha L. Stauderman, William D. Stuart, Moira A. Clay, Ralph A. Gruppo, Sarah H. Jenkins, and Judith A. K. Harmony

774 Distribution of ICAM-3-Bearing Cells in Normal Human Tissues: Expression of a Novel Counter-Receptor for LFA-1 in Epidermal Langerhans Cells
Agustín Acevedo, Miguel A. del Pozo, Alicia G. Arroyo, Paloma Sánchez-Mateos, Roberto González-Amaro, and Francisco Sánchez-Madrid

784 Eosinophils Expressing Heparin-Binding EGF-Like Growth Factor mRNA Localize Around Lung Microvessels in Pulmonary Hypertension
Penelope P. Powell, Michael Klagsbrun, Judith A. Abraham, and Rosemary C. Jones

794 The Production of Interleukin-1 Receptor Antagonist by Human Bronchogenic Carcinoma
Daniel R. Smith, Steven L. Kunkel, Theodore J. Standiford, Stephen W. Chensue, Mark W. Rolfe, Mark B. Orringer, Richard I. Whyte, Marie D. Burdick, Jean M. Danforth, Andrew R. Gilbert, and Robert M. Strieter

804 Microphthalmia and Cerebral Atrophy Induced in Mouse Embryos by Infection with Murine Cytomegalovirus in Midgestation
Yoshihiro Tsutsui, Akiko Kashiwai, Noriko Kawamura, and Chika Kadota

814 Effects of Human Immunodeficiency Virus Sera and Macrophage Supernatants on Mesangial Cell Proliferation and Matrix Synthesis
Joseph Mattana, Mirel Abramovici, and Pravin C. Singhal

823 Abnormal Cytoskeletal Assembly in Platelets from Uremic Patients
Ginés Escolar, Maribel Díaz-Ricart, Aleix Cases, Ricardo Castillo, Antonio Ordinas, and James G. White

832 Analysis of the Growth Properties and Physical State of the Human Papillomavirus Type 16 Genome in Cell Lines Derived from Primary Cervical Tumors
Lundy Braun, Ryoko Mikumo, Hon Fong L. Mark, and Stuart Lauchlan

845 High Levels of p53 Protein Expression Do Not Correlate with p53 Gene Mutations in Anaplastic Large Cell Lymphoma
Ethel Cesarman, Giorgio Inghirami, Amy Chadburn, and Daniel M. Knowles

857 Response of Macaque Bronchiolar Epithelium to Ambient Concentrations of Ozone
Jack R. Harkema, Charles G. Plopper, Dallas M. Hyde, Judith A. St. George, Dennis W. Wilson, and Donald L. Dungworth

867 Glycoprotein CD44 Expression and Its Association with Survival in Breast Cancer
Heikki Joensuu, Pekka J. Klemi, Sakari Toikkanen, and Sirpa Jalkanen,

875 Atheromatous Plaque Macrophages Produce Plasminogen Activator Inhibitor Type-1 and Stimulate Its Production by Endothelial Cells and Vascular Smooth Muscle Cells
Peter G. Tipping, P. Davenport, M. Gallicchio, E. L. Filonzi, J. Apostolopoulos, and J. Wojta

886 Serine Protease Inhibitor Antithrombin III and Its Messenger RNA in the Pathogenesis of Alzheimer's Disease
Rajesh N. Kalaria, Todd Golde, Stephanie N. Kroon, and George Perry

894 Analysis of Monocyte Chemoattractant Protein 1-Mediated Lung Injury Using Rat Lung Organ Cultures
Jeffrey S. Warren, Michael L. Jones, and Craig M. Flory

907 Degradation of Endothelial Cell Matrix Heparan Sulfate Proteoglycan by Elastase and the Myeloperoxidase-H_2O_2-Chloride System
Seymour J. Klebanoff, Michael G. Kinsella, and Thomas N. Wight

918 Microtubule Antagonists Activate Programmed Cell Death (Apoptosis) in Cultured Rat Hepatocytes
Kazuo Tsukidate, Kazubiko Yamamoto, Jack W. Snyder, and John L. Farber

926 Morphological Aspects of Angiogenesis in Experimental Liver Metastases
Sándor Paku and Károly Lapis

937 Microtubule Disruption Stimulates DNA Synthesis in Bovine Endothelial Cells and Potentiates Cellular Response to Basic Fibroblast Growth Factor
Lucy Liaw and Stephen M. Schwartz

949 Activation of Hepatocyte Growth Factor by the Plasminogen Activators uPA and tPA
Wendy M. Mars, Reza Zarnegar, and George K. Michalopoulos

Animal Models

959 Chronic Lyme Borreliosis in the Laboratory Mouse
Stephen W. Barthold, Mark S. de Souza, Jeffrey L. Janotka, Abigail L. Smith, and David H. Persing

972 A Spontaneous Mutation Characterized by Chronic Proliferative Dermatitis in C57BL Mice
Harm HogenEsch, Marion J. J. Gijbels, Erik Offerman, Joop van Hooft, Dirk W. van Bekkum, and Chris Zurcher

983 **Announcements**

October 1993

Rous-Whipple Award Lecture

985 Atherosclerosis: A Defense Mechanism Gone Awry
Russell Ross

Short Communications

1003 Expression of Osteopontin Messenger RNA by Macrophages in Atherosclerotic Plaques: A Possible Association with Calcification
Seiichi Hirota, Masami Imakita, Kenjiro Kobri, Akibiko Ito, Eiichi Morii, Shiro Adachi, Hyung-Min Kim, Yukibiko Kitamura, Chikao Yutani, and Shintaro Nomura

1009 Polymorphonuclear Leukocytes as a Significant Source of Tumor Necrosis Factor-α in Endotoxin-Challenged Lung Tissue
Zhou Xing, Haresh Kirpalani, Diane Torry, Manel Jordana, and Jack Gauldie

1016 Interferon-γ and Tumor Necrosis Factor-α Exert Their Antirickettsial Effect via Induction of Synthesis of Nitric Oxide
Hui-min Feng and David H. Walker

1024 Basic Fibroblast Growth Factor: Its Role in the Control of Smooth Muscle Cell Migration
Christopher L. Jackson and Michael A. Reidy

1032 Productive Infection of Human Fetal Microglia by HIV-1
Sunbee C. Lee, William C. Hatch, Wei Liu, Yvonne Kress, William D. Lyman, and Dennis W. Dickson

1040 ICAM-3 Expression on Endothelium in Lymphoid Malignancy
Ipatia Doussis-Anagnostopoulou, Loukas Kaklamanis, Jacqueline Cordell, Margaret Jones, Helen Turley, Karen Pulford, David Simmons, David Mason, and Kevin Gatter

1044 Epstein–Barr Virus in Pyothorax-Associated Pleural Lymphoma
Masashi Fukayama, Tazuko Ibuka, Yukiko Hayashi, Takayo Ooba, Morio Koike, and Shuki Mizutani

Technical Advances

1050 Hepatocyte Paraffin 1: A Monoclonal Antibody that Reacts with Hepatocytes and Can Be Used for Differential Diagnosis of Hepatic Tumors
Anne E. Wennerberg, Michael A. Nalesnik, and William B. Coleman

1055 Dorsal Skinfold Chamber Technique for Intravital Microscopy in Nude Mice
Hans-Anton Lehr, Michael Leunig, Michael D. Menger, Dirk Nolte, and Konrad Messmer

Regular Articles

1063 Association of Epstein–Barr Virus with Gastric Carcinoma with Lymphoid Stroma
K. Oda, J. Tamaru, T. Takenouchi, A. Mikata, M. Nunomura, N. Saitoh, H. Sarashina, and N. Nakajima

1072 Epstein–Barr Virus-Latent Gene Expression and Tumor Cell Phenotype in Acquired Immunodeficiency Syndrome-Related Non-Hodgkin's Lymphoma: Correlation of Lymphoma Phenotype with Three Distinct Patterns of Viral Latency
Stephen J. Hamilton-Dutoit, Delphine Rea, Martine Raphael, Kristian Sandvej, Henri J. Delecluse, Christian Gisselbrecht, Laure Marelle, Johan H.J.M. van Krieken, and Gorm Pallesen

1086 Major Histocompatibility Complex Class I and Class II Antigen Expression in Diffuse Large Cell and Large Cell Immunoblastic Lymphomas: Absence of a Correlation between Antigen Expression and Clinical Outcome
L. Jeffrey Medeiros, Arnold B. Gelb, Kenneth Wolfson, Reuben Doggett, Brigitte McGregor, Richard S. Cox, Sandra J. Horning, and Roger A. Warnke

1098 Localization of β1 Integrins and Their Extracellular Ligands in Human Lymphoid Tissues
Timo K. van den Berg, Marja van der Ende, Ed A. Döpp, Georg Kraal, and Christine D. Dijkstra

1111 White Pulp Reconstitution after Human Bone Marrow Transplantation
Atsuo Nakayama, Norio Hirabayashi, Masafumi Ito, Kenji Kasai, Masahiko Fujino, Masaharu Obbayashi, and Junpei Asai

1121 Differential Expression of Tumor Necrosis Factor and Interleukin-6 by Peritoneal Macrophages *in Vivo* and In Culture
Gordon K. Wollenberg, Laura E. DeForge, Gerald Bolgos, and Daniel G. Remick

1131 Analysis of p60 and p80 Tumor Necrosis Factor-α Receptor Messenger RNA and Protein in Human Placentas
Krishna K. Yelavarthi and Joan S. Hunt

1142 Constitutive and Cytokine-Induced Expression of Human Leukocyte Antigens and Cell Adhesion Molecules by Human Myotubes
Dorothea Michaelis, Norbert Goebels, and Reinhard Hohlfeld

1150 *In Vitro* and *in Vivo* Analysis of Cellular Origin of Cervical Squamous Metaplasia
Kouichiro Tsutsumi, Qi Sun, Shigeru Yasumoto, Keiji Kikuchi, Yujiro Obta, Alan Pater, and Mary M. Pater

1159 A Tumorigenic Murine Sertoli Cell Line That Is Temperature-Sensitive for Differentiation
Kim Boekelheide, Jae-Woo Lee, Susan J. Hall, Nicholas R. Rbind, and Kenneth S. Zaret

1169 Expression of Parathyroidlike Protein in Normal, Proliferative, and Neoplastic Human Breast Tissues
Helen Liapis, Edmond C. Crouch, Leonard E. Grosso, Sobei Kitazawa, and Mark R. Wick

1179 The Production of Chemotactic Cytokines in an Allogeneic Response: The Role of Intercellular Adhesion Molecule-1 and Lymphocyte Function-Antigen-3
Nicholas W. Lukacs, Steven L. Kunkel, Marie D. Burdick, and Robert M. Strieter

1189 Macrophage Production of Basic Fibroblast Growth Factor in the Fibroproliferative Disorder of Alveolar Fibrosis after Lung Injury
Craig Henke, William Marineili, Jose Jessurun, Joan Fox, Dana Harms, Mark Peterson, Lan Chiang, and Paul Doran

1200 Localization of Dystrophin and β-Spectrin in Vacuolar Myopathies
Jan L. De Bleecker, Andrew G. Engel, and John C. Winkelmann

1209 Cell Density Modulates Growth, Extracellular Matrix, and Protein Synthesis of Cultured Rat Mesangial Cells
Albert Wolthuis, Adriana Boes, and Joris Grond

1220 Expression of Selectin Ligands by Cutaneous Squamous Cell Carcinoma
Richard W. Groves, Michael H. Allen, Elizabeth L. Ross, Gulrukh Ahsan, Jonathan N. W. N. Barker, and Donald M. MacDonald

1226 *In Vivo* Role of Phagocytic Synovial Lining Cells in Onset of Experimental Arthritis
P.L.E.M. Van Lent, A.E.M. Van den Hoek, L.A.M. Van den Bersselaar, M.F.R. Spanjaards, N. Van Rooijen, C.D. Dijkstra, L.B.A. Van de Putte, and W.B. Van den Berg

1238 **Announcements**

November 1993

Rous-Whipple Award Lecture

1239 Viruses and Diseases of the Twenty-First Century
Michael B. A. Oldstone

Short Communications

1250 Epstein–Barr Virus in Gastric Carcinoma
Masayoshi Tokunaga, Charles E. Land, Yoshiko Uemura, Takahiro Tokudome, Sadao Tanaka, and Eiichi Sato

1255 Increased Expression of Vascular Permeability Factor (Vascular Endothelial Growth Factor) and Its Receptors in Kidney and Bladder Carcinomas
Lawrence F. Brown, Brygida Berse, Robert W. Jackman, Kathi Tognazzi, Eleanor J. Manseau, Harold F. Dvorak, and Donald R. Senger

1263 Epstein–Barr Virus in Adult T-Cell Leukemia/Lymphoma
Masayoshi Tokunaga, Shosuke Imai, Yoshiko Uemura, Takahiro Tokudome, Toyoro Osato, and Eiichi Sato

1270 Epstein–Barr Virus Infection and *bcl-2* Proto-Oncogene Expression: Separate Events in the Pathogenesis of Hodgkin's Disease?
Gufaraz Khan, Rajnish K. Gupta, Philip J. Coates, and Gerard Slavin

1275 *In Situ* Hybridization of HIV-1 RNA in Retinal Vascular Wall
Isabelle Reux, Anne-Marie Fillet, Jean-Gilly Fournier, Henri Agut, Marc Gentilini, Phuc LeHoang, and Jean-Jacques Hauw

1280 High Expression of the Epstein–Barr Virus Latent Protein EB Nuclear Antigen-2 on Pyothorax-Associated Lymphomas
Yuko Sasajima, Hiroshiko Yamabe, Yoichiro Kobashi, Kanji Hirai, and Shigeo Mori

1286 Dual Inhibition of VLA-4 and LFA-1 Maximally Inhibits Cutaneous Delayed-Type Hypersensitivity-Induced Inflammation
Thomas B. Issekutz

1294 Detection of the (11;22)(q24;q12) Translocation of Ewing's Sarcoma and Peripheral Neuroectodermal Tumor by Reverse Transcription Polymerase Chain Reaction
James R. Downing, David R. Head, David M. Parham, Edwin C. Douglass, Mary G. Hulsbof, Michael P. Link, Tina A. Motroni, Holcombe E. Grier, Anita M. Curcio-Brint, and David N. Shapiro

Technical Advances

1301 Pulsed-Field Gel Electrophoresis Analysis of Retinoic Acid Receptor-α and Promyelocytic Leukemia Rearrangements: Detection of the t(15;17) Translocation in the Diagnosis of Acute Promyelocytic Leukemia
Yong-Hong Xiao, Wilson H. Miller, Jr., Raymond P. Warrell, Jr., Eitan Dmitrovsky, and Andrew D. Zelenetz

Regular Articles

1312 Hepatic Morphology and Iron Quantitation in Perinatal Hemochromatosis: Comparison with a Large Perinatal Control Population, including Cases with Chronic Liver Disease
Meredith M. Silver, Leslie S. Valberg, Ernest Cutz, Lois D. Lines, and M. James Phillips

1326 Oval Cell Proliferation in Early Stages of Hepatocarcinogenesis in Simian Virus 40 Large T Transgenic Mice
Myriam Bennoun, Maryvonne Rissel, Natalya Engelhardt, André Guillouzo, Pascale Briand, and Anne Weber-Benarous

1337 Deficient Differentiation of Mast Cells in the Skin of *mi/mi* Mice: Usefulness of *in Situ* Hybridization for Evaluation of Mast Cell Phenotype
Tsutomu Kasugai, Kayoko Oguri, Tomoko Jippo-Kanemoto, Masahiro Morimoto, Atsushi Yamatodani, Keiichi Yoshida, Yoshitaka Ebi, Koji Isozaki, Hideki Tei, Tohru Tsujimura, Shintaro Nomura, Minoru Okayama, and Yukihiko Kitamura

1348 Constitutive Expression of Tenascin in T-Dependent Zones of Human Lymphoid Tissues
Marco Chilosi, Maurizio Lestani, Alice Benedetti, Licia Montagna, Serena Pedron, Aldo Scarpa, Fabio Menestrina, Setsuo Hirohashi, Giovanni Pizzolo, and Gianpietro Semenzato

1356 Extensive Complement Activation in Hereditary Porcine Membranoproliferative Glomerulonephritis Type II (Porcine Dense Deposit Disease)
Johan H. Jansen, Kolbjørn Høgåsen, and Tom E. Mollnes

1366 Temporal Expression of Autocrine Growth Factors Corresponds to Morphological Features of Mesangial Proliferation in Habu Snake Venom-Induced Glomerulonephritis
Jeffrey L. Barnes and Hanna E. Abboud

1377 Microvascular Pericytes Express Platelet-Derived Growth Factor-β Receptors in Human Healing Wounds and Colorectal Adenocarcinoma
Christian Sundberg, Magnus Ljungström, Gudrun Lindmark, Bengt Gerdin, and Kristofer Rubin

1389 p53 Nuclear Protein Accumulation Correlates with Mutations in the p53 Gene, Tumor Grade, and Stage in Bladder Cancer
David Esrig, Charles H. Spruck III, Peter W. Nichols, Benjaporn Chaiwun, Kenneth Steven, Susan Grosben, Su-Chiu Chen Donald G. Skinner, Peter A. Jones, and Richard J. Cote

1398 p53 Gene Mutations and MDM2 Amplification Are Uncommon in Primary Carcinomas of the Uterine Cervix
Theodore D. Kessis, Robbert J. Slebos, Sung M. Han, Keerti Shah, Xavier F. Bosch, Nubia Muñoz, Lora Hedrick, and Kathleen R. Cho

1406 Macrophages and Multicellular Tumor Spheroids in Co-Culture: A Three-Dimensional Model to Study Tumor-Host Interactions: Evidence for Macrophage-Mediated Tumor Cell Proliferation and Migration
Steffen Hauptmann, Gabriele Zwadlo-Klarwasser, Marc Jansen, Bernd Klosterhalfen, and Charles James Kirkpatrick

1416 Immunohistochemical Characterization of Intraepithelial and Subepithelial Mononuclear Cells of the Upper Airways
Fiona Graeme-Cook, Atol K. Bban, and Nancy L. Harris

1423 Immunocytochemical and Biochemical Characterization of the Heymann Nephritis Antigenic Complex in Rat L2 Yolk Sac Cells
Marita Lundstrom, Robert A. Orlando, Mohammed S. Saedi, Luann Woodward, Hidetake Kurihara, and Marilyn Gist Farquhar

1436 Induction of Different Types of Glomerulonephritis by Monoclonal Antibodies Derived from an MRL/lpr Lupus Mouse
Junpei Itoh, Masato Nose, Satoru Takahashi, Masao Ono, Shizuko Terasaki, Emiko Kondoh, and Masahisa Kyogoku

1444 Transitional Features in Human Atherosclerosis: Intimal Thickening, Cholesterol Clefts, and Cell Loss in Human Aortic Fatty Streaks
John R. Guyton and Keith F. Klemp

1458 Regulation of Extracellular Matrix Proteins and Integrin Cell Substratum Adhesion Receptors on Epithelium during Cutaneous Human Wound Healing *in Vivo*
Istvan Jubasz, George F. Murphy, Horng-Chin Yan, Meenhard Herlyn, and Steven M. Albelda

1470 Accumulation of Abnormal Prion Protein in Mice Infected with Creutzfeldt–Jakob Disease via Intraperitoneal Route: A Sequential Study
Tamaki Muramoto, Tetsuyuki Kitamoto, Jun Tateishi, and Ikuo Goto

1480 Characterization of the Inbred CE/J Mouse Strain as Amyloid Resistant
Jean D. Sipe, Isabel Carreras, Wayne A. Gonnerman, Edgar S. Cathcart, Maria C. de Beer, and Frederick C. de Beer

1486 Feline Immunodeficiency Virus Predisposes Cats to Acute Generalized Toxoplasmosis
Michael G. Davidson, James B. Rottman, Robert V. English, Michael R. Lappin, and Mary B. Tompkins

1498 Effect of Thrombin on Maturing Human Megakaryocytes
Elisabeth Martin Cramer, Jean-Marc Massé, Jacques P. Caen, Isabel Garcia, Janine Breton-Gorius, Najet Debili, and William Vainchenker

1509 **Announcements**

December 1993

Review

1511 The SCID Mouse: Relevance as an Animal Model System for Studying Human Disease
Eric A. Hendrickson

Commentary

1523 Selective Ultraviolet Radiation Fractionation and Polymerase Chain Reaction Analysis of Genetic Alterations
Darryl Shibata

Technical Advances

1527 *In Situ* cDNA Polymerase Chain Reaction: A Novel Technique for Detecting mRNA Expression
Raymond H. Chen and Susan V. Fuggle

Short Communications

1535 Detection of Anti-Sense Transcripts of the Insulin-Like Growth Factor-2 Gene in Wilms' Tumor
P. Baccarini, M. Fiorentino, A. D'Errico, A. M. Mancini, and W. F. Grigioni

1543 Expression of the Apoptosis-Suppressing Protein *bcl*-2, in Neuroblastoma Is Associated with Unfavorable Histology and N-*myc* Amplification
Valerie P. Castle, Kathleen P. Heidelberger, Judith Bromberg, Xianglan Ou, Mukund Dole, and Gabriel Nuñez

1551 Inducible Expression of Vascular Cell Adhesion Molecule-1 by Vascular Smooth Muscle Cells *In Vitro* and Within Rabbit Atheroma
Hongmei Li, Myron I. Cybulsky, Michael A. Gimbrone, Jr., and Peter Libby

1560 Immunohistochemical Localization of Trk Receptor Protein in Pediatric Small Round Blue Cell Tumors
Michael J. Donovan, Barbara L. Hempstead, Curt Horvath, Moses V. Chao, and Deborah Schofield

1568 Immunohistochemical Detection of the NS4 Antigen of Hepatitis C Virus and Its Relation to Histopathology
Keril Blight, Robert Rowland, Pauline de la M. Hall, Richard R. Lesniewski, Rachel Trowbridge, Justin T. LaBrooy, and Eric J. Gowans

1574 Somatostatin Analogue (Octreotide) Inhibits Bile Duct Epithelial Cell Proliferation and Fibrosis After Extrahepatic Biliary Obstruction
Thomas F. Tracy, Jr., A. Joseph Tector, Mary E. Goerke, Sarah Kitchen, and David Lagunoff

1579 Melanocyte Lineage-Specific Antigens Recognized by Monoclonal Antibodies NKI-beteb, HMB-50, and HMB-45 are Encoded by a Single cDNA
Gosse J. Adema, Annemiek J. de Boer, Rianne van 't Hullenaar, Marylène Denijn, Dirk J. Ruiter, Arthur M. Vogel, and Carl G. Figdor

1586 Immunocytochemical Evidence That the β-Protein Precursor Is an Integral Component of Neurofibrillary Tangles of Alzheimer's Disease
George Perry, Peggy L. Richey, Sandra L. Siedlak, Mark A. Smith, Paul Mulvihill, David A. DeWitt, Jody Barnett, Barry D. Greenberg, and Rajesh N. Kalaria

1594 Is the "Preamyloid" of Diffuse Plaques in Alzheimer's Disease Really Nonfibrillar?
C. A. Davies and D. M. A. Mann

Regular Articles

1606 Activation, Proliferation, and Differentiation of Progenitor Cells into Hepatocytes in the D-Galactosamine Model of Liver Regeneration
Mariana D. Dabeva and David A. Shafritz

1621 Acute Side Effects of Homologous Interleukin-3 in Rhesus Monkeys
Francis C. J. M. van Gils, Andries H. Mulder, Cor van den Bos, Herman Burger, Rob W. van Leen, and Gerard Wagemaker

1634 Type I Collagen Gene Expression in Human Atherosclerosis: Localization to Specific Plaque Regions
M. D. Rekhter, K. Zhang, A. S. Narayanan, S. Phan, M. A. Schork, and D. Gordon

1649 Immunohistochemical Localization of Advanced Glycosylation Endproducts in Coronary Atheroma and Cardiac Tissue in Diabetes Mellitus
Yoshiyuki Nakamura, Yasuhiro Horii, Toshihiko Nishino, Hideo Shiiki, Yasuhiro Sakaguchi, Tadashi Kagoshima, Kazuhiro Dohi, Zenji Makita, Helen Vlassara, and Richard Bucala

1657 Localization of mRNAs Representing Collagenase and TIMP in Sections of Healing Human Burn Wounds
George P. Stricklin, Liying Li, Vesna Jancic, Barbara A. Wenczak, and Lillian B. Nanney

1667 Keratin 17 Expression as a Marker for Epithelial Transformation in Viral Warts
C. M. Proby, L. Churchill, P. E. Purkis, M. T. Glover, C. J. Sexton, and I. M. Leigh

1679 Differential Expression of SKALP/Elafin in Human Epidermal Tumors
Hans A. C. Alkemade, Henri O. F. Molhuizen, Ivonne M. J. J. van Vlijmen-Willems, Urbaan J. G. M. van Haelst, and Joost Schalkwijk

1688 The Human Peripheral Lymph Node Vascular Addressin: An Inducible Endothelial Antigen Involved in Lymphocyte Homing
Sara A. Michie, Philip R. Streeter, Patricia A. Bolt, Eugene C. Butcher, and Louis J. Picker

1699 Survey of the Distribution of a Newly Characterized Receptor for Advanced Glycation End Products in Tissues
Jerold Brett, Ann Marie Schmidt, Shi Du Yan, Yu Shan Zou, Elliott Weidman, David Pinsky, Roman Nowygrod, Michael Neeper, Craig Przysiecki, Alan Shaw, Antonio Migheli, and David Stern

1713 Protection from Tumor Necrosis Factor-Mediated Cytolysis by Platelets
Carole Philippe, Bruno Philippe, Bruno Fouqueray, Joëlle Perez, Marilyne Lebret, and Laurent Baud

1724 Tumor Necrosis Factor Activates Human Endothelial Cells Through the p55 Tumor Necrosis Factor Receptor but the p75 Receptor Contributes to Activation at Low Tumor Necrosis Factor Concentration
Mark R. Slowik, Linda G. De Luca, Walter Fiers, and Jordan S. Pober

1731 Differential Loss of E-Cadherin Expression in Infiltrating Ductal and Lobular Breast Carcinomas
Roland Moll, Margarete Mitze, Uwe H. Frixen, and Walter Birchmeier

1743 Overexpression and Abnormal Modification of the Stress Proteins αB-Crystallin and HSP27 in Alexander Disease
Mark W. Head, Elaine Corbin, and James E. Goldman

1754 Rat Alveolar Myofibroblasts Acquire α-Smooth Muscle Actin Expression during Bleomycin-Induced Pulmonary Fibrosis
Sergei L. Vyalov, Giulio Gabbiani, and Yusuf Kapanci

1766 **Acknowledgment**

1768 **Announcements**

1769 Index of Subjects

1788 Index of Authors